Sexual History-Taking among Primary Care Physicians

Yolanda H. Wimberly, MD, MSc; Matthew Hogben, PhD; Jada Moore-Ruffin, MD; Sandra E. Moore, MD; and Yvonne Fry-Johnson, MD

Atlanta, Georgia

Background: Because many people seek sexual healthcare in settings where they seek primary healthcare, the extent to which primary care physicians take sexual histories is important. We surveyed Atlanta-area primary care physicians to estimate the extent to which they take sexual histories as well as the components of those histories and the circumstances under which they are taken.

Methods: Four-hundred-sixteen physicians in four specialties (obstetrics/gynecology, internal medicine, general/family practice, pediatrics) responded to a mail survey conducted during 2003–2004. Respondents answered whether they asked about sexual activity at all, including specific components of a comprehensive sexual history such as sexual as sexual orientation, numbers of partners and types of sexual activity, during routine exams, initial exams, complaint-based visits or never. Respondents also reported their opinions on whether they felt trained and comfortable taking sexual histories.

Results: Respondents (51% male, 58% white) saw an average of 94 patients per week. A majority (56%) felt adequately trained, while 79% felt comfortable taking sexual histories. Almost three in five (58%) asked about sexual activity at a routine visit, but much smaller proportions (12–34%) asked about the components of a sexual history. However, 76% of physicians reported asking about sexual history (61–75% for various components) if they felt it would be relevant to the chief complaint.

Conclusions: Most physicians report feeling comfortable taking sexual histories and will do so if the patient's apparent complaint is related to sexual health. But sexual histories as part of routine and preventive healthcare are less common, and many physicians miss essential components of a comprehensive sexual history. Structural changes and suggestions for training to enhance sexual history-taking are discussed.

Key words: sexual history ■ primary care physicians

 From Morehouse School of Medicine (Wimberly, Moore, Fry-Johnson), and Division of STD Prevention, Centers for Disease Control and Prevention (Hogben), Atlanta, GA; and Grant Medical Center, Columbus, OH (Moore-Ruffin). Send correspondence and reprint requests for *J Natl Med Assoc.* 2006;98:1924–1929 to: Dr. Yolanda Hill Wimberly, Morehouse School of Medicine, Department of Pediatrics, 720 Westview Drive SW, Atlanta, GA 30310; e-mail: ywimberly@msm.edu

Many patients seek sexual healthcare from their primary care physicians as opposed to STD clinics.[1] Therefore, it is crucial that primary care physicians be skilled in obtaining accurate and comprehensive sexual histories to inform appropriate screening or testing and risk-reduction counseling. A comprehensive sexual history includes inquiry about sexual activity and related behaviors that increase an individual's risk for development of various diseases: individual-level behaviors and factors often associated with sexual risk from the literature include numbers of sexual partners, frequency of sexual intercourse, use of injection drugs, sexual orientation, types of sex (oral, vaginal or anal), prior or recent history of STDs, sexual abuse.

Taking a sexual history provides opportunities for physicians to assess patients' risk factors for STDs and effectively counsel patients regarding sexual behaviors. The U.S. Preventive Task Force and the National Academy of Sciences' Institute of Medicine recommend that physicians obtain a sexual history at least annually to determine the need for further evaluation and/or the risk of STDs.[2,3] According to survey research,[4] patients agree with these recommendations; 91% of them thought it was appropriate for their physician to obtain a sexual history. Reports, however, suggest that the competence and comfort level of physicians and medical students in taking sexual histories is less than optimal.[5-9] One California survey of >1,000 primary care physicians found that only 10% of physicians obtained a sexual history, while another in New York found that only one-third of the 429 physicians surveyed obtained a sexual history.[10,11] A survey of 2,766 women found that only one-third had talked with their physician about their sexual practices in the past three years and that only one-third of those were cautioned about STDs during the time.[12]

The objective of this study was to determine the sexual history-taking and practices of metro Atlanta primary care physicians in the fields of family medicine, internal medicine, obstetrics/gynecology and pediatrics. Given previous findings that taking sexual histories differed by specialty and gender,[9] we also looked at such differences in our sample. We also examined the effects of race and age.

METHODS

Participants and Procedures

Surveys were initially mailed via Federal Express to 1,632 primary care physicians drawn from a comprehensive database from the Georgia Board of Medical Examiners of 2,127 Atlanta-area primary care physicians in July 2003. Second (N=1,405) and third (N=960) rounds of surveys were mailed between July 2003 and 2004 via the U.S. Postal Service to those who did not respond to the initial mailing. After up to three mailings, 416 usable surveys were returned, or 34% of those mailed after deletion from the denominator of 398 undeliverable surveys and notifications of moving or retirement. Surveys were stored in a locked file cabinet, and data were input into SPSS.

Similar to an earlier report of southern physicians' characteristics,[13] respondents averaged approximately 44 years old, with 18 years' experience since graduating from medical school (Tables 1 and 2). The mean number of weekly patients seen was approximately 12% lower than in the earlier report, 93.8 vs. 106.2, and a substantially larger proportion of physicians were female (49.8% vs. 27.3%) and African American or black (24.3% vs. 5.9%). Most physicians in this survey saw patients across patient life spans. The most common form of practice was a single-specialty setting with ≤5 total physicians in the practice as full or part owners. Primary specialty was quite evenly spread, 20–28% for each specialty. Approximately one in seven worked in hospital settings, but employment in a health maintenance organization was rare, with approximately one in 20.

Survey Content

Survey topics fell into three domains of questions; 1) training, 2) attitudes, and 3) practices. For training, physicians responded how well trained they felt to take a sexual history and to screen/treat (five-point scales with labels: 1 = no training, 2 = little training, 3 = some training, 4 = adequate training, 5 = more than adequate training). For attitudes, physicians reported how important, how relevant to medical care and how comfortable they felt taking a sexual history (five-point scales with labels: 1 = not at all, 2 = not very, 3 = somewhat, 4 = fairly, 5 = extremely). They also answered whether they felt taking a sexual history takes too much time (1 = never, 2 = rarely, 3 = sometimes, 4 = usually, 5 = always). For practices, physicians reported whether they asked patients about sexual activity at all, what specific questions they asked and under what circumstances they did so. Physicians could reply "yes" to any or all of the initial medical history, an annual exam, each visit, if relevant to chief complaint. The specific questions are listed in Table 4; a copy of the survey is available from the corresponding author.

Analyses

In addition to descriptive statistics for physicians and their practices, means, medians and standard deviations for continuous variables, frequency distributions in percentages for categorical variables (Tables 1 and 2), we looked for associations among attitudes, training and history-taking behaviors with Pearson correlations. We also examined all three domains by gender, race and specialty using odds ratios and adjusted odds ratios derived from logistic regressions.

RESULTS

Training and Attitudes

Physicians reported mean levels of training between "some" and "adequate" with respect to taking a sexual history (M=3.47, SD=1.07) and screening and treating (M=3.90, SD=0.89). Of the sample, 55.8% reported adequate or more-than-adequate training for taking sexual histories; 64.2% reported the same for screening and treating.

Table 1. Sociodemographic and professional characteristics of sample

Male (%)	50.8		
Mean Age (SD)	44.4 (10.0)		
Race/Ethnicity (%)	**Total**	**By Hispanic/Latino Status**	
		Yes	**No**
African American/black	24.8	0.5	24.3
Asian American	13.3	0	13.3
White	58.0	2.5	55.5
Other	4.1	2.0	2.1
Total (Hispanic/Latino)	–	5.0	95.0
Mean Years since Medical School Graduation (SD)	18.2 (10.2)		
Board Certified (%)	90.1		

N=416; Not all physicians answered all questions, but ≥410 answered any given question.

Physicians reported that taking a sexual history rarely took too much time (M=2.29, SD=1.04, 57.3% rarely or never), and that taking one was important (M=4.15, SD=0.85, 77.2% fairly or extremely) and relevant to medical care (M=4.29, SD=0.80, 84.9% fairly or extremely). Physicians also typically reported that they were comfortable taking a sexual history (M=4.13, SD =0.96, 79.1% fairly or extremely). Correlations among these variables are presented in Table 3.

Physician Practices

This section will provide information on how participants answered questions when they obtained a sexual history from their patients.

Routine examinations (annual or initial). Fifty-five percent of physicians surveyed stated they asked about sexual activity during an annual examination, and a further 3.6% asked at every visit (Table 4). However, a smaller proportion—34%—asked about the number of sex partners at annual examinations; only 12% asked about sexual practices of the partner, and 11% asked about sexual abuse. About one in seven physicians—15%—never asked about sexual abuse at all.

"If relevant to the chief complaint." Just over three-fourths—75.5%—of physicians asked about sexual activity if they felt it relevant to the chief complaint, so most physicians have asked some of their patients about sexual activity at some point. Similar proportions asked about number of sex partners (73.6%), frequency of intercourse (69.2%), partner sexual practices, (62.0%), sexual orientation (60.8%) and sexual abuse (70.4%).

For sexual orientation, we looked at the initial medical history instead of the annual exam but found that only 34% of physicians ask about sexual orientation at that exam. Another 10% asked at the annual exam and 1% at each visit, for a combined total of 45%.

Analyses by Specialty, Race and Gender

Because the main focus of this paper is upon the responses of the overall sample, we present data only for the general question of whether the physician asked about any sexual activity on either an annual exam or at each visit. We found no differences by physician age in taking sexual histories and examined this variable no further. Female physicians (72.4%) were more likely to ask about sexual activity than were male physicians (45.0%) (Table 5). This pattern was visible throughout the remaining sexual-history questions except those about types of sex practices. Pediatricians (75.4%) were most likely to report taking a sexual history at either an annual visit or at each visit, although their mean rate was not statistically different from that of obstetricians and gynecologists (68.2%) (Table 5). Responses by specialty for remaining sexual history questions followed the same pattern more often than not, but with generally small differences between pediatricians, obstetricians and gynecologists, and general or family practitioners. Due to low numbers of physicians reporting racial/ethnic identification other than African American or white (Table 1), we constructed a three-level variable for comparing sexual history-taking by race. African-American

Table 2. Patient and practice characteristics of sample

Mean weekly patients seen (SD)	93.8 (70.5)	Median = 89
Age range of patients (years)		
Mean lower bound (SD)	9.4 (9.9)	Median = 11
Mean upper bound (SD)	68.8 (33.9)	Median = 83
Primary medical specialty (%)		
General or family practice	19.5	
Internal medicine	25.0	
Obstetrics/gynecology	21.2	
Pediatrics	28.4	
Other	5.5	
Number of physicians in practice (%)		
1	17.3	
2–5	39.3	
6–15	26.6	
≥16	16.8	
Primary practice arrangement (%)	Single specialty	Multispecialty
Physician practice (full/part owner)	41.8	1.9
Physician practice (employee)	12.7	2.9
Staff or group model HMO	0.5	4.6
Hospital or clinic	12.7	13.9
Other	5.1	3.9
Total	72.7	23.3

N=416; Not all respondents answered all questions, but ≥400 responded to any given question.

physicians (70.2%) were more likely than other categories—57.5% of whites, 46.8% of others—to take sexual histories on a routine basis ($p<0.05$).

Because female physicians made up a higher proportion of pediatricians (59.3%), and obstetricians and gynecologists (53.4%), who were more likely to take sexual histories than internists (44.2% female and general/family practitioners 39.5% female), we also calculated odds ratios for gender controlling for specialty and vice versa (Table 5). Having found differences by race, we also included odds ratios adjusted for racial/ethnic identification as well. These adjusted odds ratios show independent effects for all three variables that generally match the unadjusted statistics. The one exception was that African-American physicians were no longer more likely to take sexual histories than white physicians when we adjusted for gender and specialty (Table 5).

DISCUSSION

This study presents a mixed portrait insofar as judging whether PCPs offer sexual health services on an appropriate basis. Just over half of PCPs ask about sexual activity on either an annual basis or at each visit. Asking at each visit is not essential, but it would certainly suffice. Although approximately three-quarters reported taking sexual histories if relevant to the patient's complaint, the difference is more indicative of a reactive approach to medical care than a preventive approach.

We also noted that asking a broad question about sexual behavior was much more common than many of what we consider the components of a criterion-based sexual history. For example, only a fifth of physicians who reported asking about sexual behavior at all asked about partners' sexual practices. Physicians sometimes focus on assuring that patients know about STDs and about safe sex, rarely asking what their partner's sexual behaviors may include. This pattern repeats throughout Table 4, including that a minority of physicians appear to never find out the sexual orientation of their patients. This pattern suggests that many of the histories may not reach appropriate standards in thoroughness.

As for characteristics of respondents related to taking histories, we found female physicians elicited sexual histories at higher rates than male physicians and that pediatricians did so at the highest rates of any specialty. The gender finding is no surprise, even when one controls for specialty; it has been reported elsewhere.[9,13] Perhaps female physicians are simply more attuned to sexual health, either directly or through reproductive health, or even because their female patient load is higher. Data from a national survey by St. Lawrence et al.[1] show that female physician gender and percentage of female patients are correlated, albeit weakly ($r=0.16$, $p<0.001$). Pediatricians, however, have no reputation for taking comprehensive sexual histories in the literature, and their relative rates in this survey were surprising if not significantly higher than those of gynecologists. This surprise is good news for sexual healthcare in the Atlanta area, because pediatricians provide care for adolescents and often young adults, who have the highest rates of many STDs of any age groups.[14]

Recommendations

Training and finding time were both negatively related to taking sexual histories, and a slight majority of physicians reported adequate training. Both remain important to producing quality sexual histories from medical professionals. Medical school modules or courses are one place, but, as since practicing physicians have not had adequate training, continuing education for them is also important. Medical students and residents often imitate the practices of their supervising physicians and if they observe them taking sexual histories and STD screens on a regular basis, then they are more likely to take sexual histories in their own practices.

Including a form listing the appropriate components of a comprehensive sexual history may also be a fruitful tactic, because many physicians appear not to collect enough information—the broad single question is not sufficient. We suggest that the annual exam include the following questions at the minimum: 1) "How many sexual partners have you had in the past year?" 2) "What do you know about the sexual practices of your partner(s)?" and 3) "Do you engage in sexual activity with males, females or both?" Physicians should also be aware of their patients' STD histories, either through chart review or asking patients using generic language. The number of sexual partners is frequently an indicator

Table 3. Correlations among training and attitudinal variables

Do you feel ...	1.	2.	3.	4.	5.	6.
1. That taking a sexual history is important?	–					
2. That taking a sexual history takes too much time?	-0.27***	–				
3. That taking a sexual history is relevant to medical care?	0.81***	-0.26***	–			
4. Comfortable taking a sexual history?	0.52***	-0.30***	0.53***	–		
5. You were adequately trained to take a sexual history?	0.22***	-0.16**	0.19***	0.44***	–	
6. You were adequately trained in screening and treatment of STDs?	0.22***	-0.12*	0.18***	0.41***	0.62***	–

N=416; * p<0.05; ** p<0.01; *** p<0.001

of STD risk and history, and partners' practices are the other side of that risk equation. With such factors as different routes of transmission combined with the epidemiology of many STDs disproportionately affecting gay men, inquiring about sexual orientation or at least gender of partners is a precursor to ensuring adequate and appropriate STD evaluation and education.

The remaining components we assessed on this survey are certainly not trivial. The U.S. Department of Justice estimates 2003 rape and sexual assault rates at 2.6–3.0 persons per 1,000 per year for women aged 16–34 years,[15] and lifetime estimates are substantially higher.[16] Figures for men are lower (0.3–0.4) but still significantly different from 0.[15] In our survey, very few physicians reported asking about abusive sex. Physician participation in the construction and promulgation of sexual history forms and practice norms may help: a study aimed at increasing chlamydial screening by physicians found their active and continuing participation in setting goals helped increase screening.[17]

Limitations and Future Directions

Our response rate suggests this sample should be treated more as a convenience sample than as a representative sample but one that captures a larger proportion than most convenience samples, with a target population of almost 20% of Atlanta-area PCPs. The low return rate for the survey may have influenced our estimates of sexual history-taking, if physicians who were more likely to report saying yes to taking a sexual history or who felt answering no would reflect badly upon them were more likely to respond than others. We suggest the latter is an unlikely source of bias because our results showed that respondents frequently answered in the negative, but note that techniques such as chart reviews and patient surveys would add validity to self-report. Also, had we asked what proportion of patients fell into which age categories for each physician, we might have refined our estimates of how often and for whom a physician should take a full sexual history. Also, although we examined physicians' sexual history-taking practices, we did not examine reasons for not obtaining a sexual history. Such a study would provide useful future data.

In summary, the odds of a physician in this survey reporting that he or she takes a sexual history from patients on a routine basis is slightly better than one in two. The odds of that history containing all relevant components of a sexual history are much lower. Some correlates of sexual history assessment are clearly reme-

Table 4. Sexual history-taking practices

Practices: In what situations do you ask patients about the following?

	Each Visit	Annual Exam	Initial Medical History	If Relevant to Chief Complaint	Never
1. Sexual Activity (Take a Sexual History)					
All physicians (%)	6.4	55.1	54.6	75.5	1.0
2. Number of Partners					
Of all physicians (%)	3.0	31.3	33.2	73.5	8.4
Of those who take a routine or initial sexual history[1] (%)	53.7				
3. Frequency of Intercourse					
All physicians (%)	1.9	19.0	17.8	69.3	18.8
Of those who take a routine or initial sexual history (%)	33.2				
4. Type of Sex Practices (vaginal, anal, oral)					
All physicians (%)	2.2	6.5	14.4	75.6	16.5
Of those who take a routine or initial sexual history (%)	20.9				
5. Partners' Sexual Practices					
All physicians (%)	0.9	11.8	14.2	58.5	26.9
Of those who take a routine or initial sexual history (%)	20.1				
6. Sexual Orientation					
All physicians (%)	0.5	18.3	33.7	60.8	12.7
Of those who take a routine or initial sexual history (%)	30.7				
7. Sexual Abuse Experience					
All physicians (%)	0.2	10.8	20.4	70.4	13.9
Of those who take a routine or initial sexual history (%)	17.2				
8. STD History					
All physicians (%)	3.5	29.1	50.7	67.8	2.4
Of those who take a routine or initial sexual history (%)	47.1				

N=416; Rows add up to more than 100% because respondents could check up to three answers (e.g., "annual exam," "initial medical history" and "if relevant to chief complaint"); 1: To estimate routine exams, we combined positive responses to annual exams with those for each visit. The total percentage of those responding positively to either or both of these choices for asking about sexual activity was 58.7%.

Table 5. Physicians' sexual history-taking on routine exams by gender, race and specialty

	Percent Asking about Sexual Activity during Routine Exams[1]	Unadjusted OR (95% CI)	OR (95% CI) Adjusted for Specialty, Race or Gender
Gender			
Males	45.0	1.00 (ref)	1.00 (ref)
Females	72.4	3.21 (2.13–4.83)	3.01 (1.91–4.75)
Race			
White	57.5	1.00 (ref)	1.00 (ref)
African American or black	70.2	1.74 (1.06–2.85)	1.44 (0.83–2.53)
Other	46.8	0.65 (0.39–1.09)	0.49 (0.27–0.87)
Specialty			
Ob/gyn	68.2	1.00 (ref)	1.00 (ref)
Pediatrics	75.4	1.43 (0.78–2.65)	1.41 (0.74–2.68)
Internal medicine	38.5	0.29 (0.16–0.53)	0.30 (0.16–0.56)
General/family practice	59.3	0.68 (0.36–1.28)	0.75 (0.39–1.46)
Other	26.1	0.17 (0.06–0.46)	0.18 (0.06–0.51)

1: Routine exams include either an annual visit or at each visit. The unadjusted odds ratios (OR) are derived from logistic regression of routine sexual history-taking (yes or no) separately onto each of gender, race and specialty. The adjusted ORs are derived from logistic regressions of routine sexual history-taking onto each variable while controlling for the effects of the other two. In no case are the adjusted ORs different from the unadjusted ORs.

diable through interventions such as physician training, sexual history forms; and some are not such as gender. But to improve the practice of taking routine comprehensive sexual histories from sexually active patients moves medicine from reactions to the presence of STD and often their dangerous sequelae to optimal preventive care. In conclusion, a comprehensive sexual history is not needed at every visit but should be obtained ≥1 per year, as routine preventive care in turn helps ensure criterion quality of healthcare and sexual health.

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